

Academic Year: (2021 / 2022)

Review date: 10/06/2021 10:27:33

Department assigned to the subject: Mechanical Engineering Department

Coordinating teacher: HERNANDEZ PAZ, VIRGINIA

Type: Basic Core ECTS Credits : 3.0

Year : 4 Semester : 2

Branch of knowledge: Engineering and Architecture

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

No pre-requirements are needed

OBJECTIVES

By the end of this content area, students will be able to have:

1. Knowledge and understanding of the scientific and mathematical principles underlying the branch of Telecommunication Technologies engineering;
2. Awareness of the wider multidisciplinary context of engineering, applying knowledge of mathematics, statistics, economics and other scientific fields to the analysis of business situations.
3. The ability to apply their knowledge and understanding to analyse engineering products, processes and methods;
4. An understanding of methodologies, and an ability to use them in the analysis of business situations.
5. The ability to select and use appropriate methods in the management of the companies;
6. An awareness of the non-technical implications of engineering practice within the management of the companies;
7. Function effectively as an individual and as a member of a team;
8. Demonstrate awareness of the health, safety and legal issues and responsibilities of engineering practice, the impact of engineering solutions in a societal and environmental context, and commit to professional ethics, responsibilities and norms of engineering practice;
9. Demonstrate an awareness of project management and business practices, such as risk and change management, and understand their limitations;

DESCRIPTION OF CONTENTS: PROGRAMME

1. The Firm: management and organization
 - 1.1. The entrepreneur and the firm. Business functions
 - 1.2. Objectives, strategies and corporate governance. Organization design
 - 1.4. Types of companies and legal forms
2. Financial management
 - 2.1. Accounting and financial statements
 - 2.2. Firm's economic-financial analysis
 - 2.3. Evaluation of investment projects
3. Operations management
 - 3.1. Product and process design
 - 3.2. Organizing for production: capacity management and location
 - 3.3. Supply chain management
4. Marketing and sales management
 - 4.1. The marketing Plan
 - 4.2. Segmentation and positioning
 - 4.3. Marketing-mix decisions

- 5. Innovation and business growth. Tech companies
- 5.1. Tech companies. Tech ecosystems
- 5.2. Growth strategies
- 5.3. Projects and team's management. Agile methodologies.

LEARNING ACTIVITIES AND METHODOLOGY

Lectures, exercises, cases and assignments to be carried out by the students and discussed during the sessions, readings assigned by the instructor or identified by the students. In addition, the students carry out a group assignment that consists of the analysis of a company, applying the knowledge acquired in the course.

ASSESSMENT SYSTEM

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|---|----|
| % end-of-term-examination/test: | 60 |
| % of continuous assessment (assignments, laboratory, practicals...): | 40 |

Continuous evaluation (40%).

Final exam (60%).

It is compulsory to achieve minimum 4 points over 10.

BASIC BIBLIOGRAPHY

- B Erasmus, S Rudansky-Kloppers, J Strydom, JA Badenhorst-Weiss, y otros (eds.). Introduction to Business Management, Oxford University Press, 2019

ADDITIONAL BIBLIOGRAPHY

- Schilling, M Strategic Management of Technological Innovation, McGraw Hil, 2017